

### REMARKS

#### Interview request

Applicants respectfully request a telephonic interview after the Examiner has reviewed the instant response and amendment. Applicants request the Examiner call Applicants' representative, as noted below.

#### Status of the claims

Applicants gratefully acknowledge the presence of allowable subject matter, namely claims 27, and 29-31, by the Examiner.

Claims 1-3, 5-11, 19-21, and 27-31 are pending. Claims 4, 6, 12-18 and 22-26 have been cancelled, without prejudice or disclaimer. Claims 1, 2, 5, and 19 have been amended.

#### Amendments to claims

Claim 1 has been amended to include the phrase "whereby the contacting occurs in a cell." Support for this amendment can be found, for example, at paragraphs 39, 53 and 56 of the specification. Claims 1 and 2 have been amended to be directed towards the genus of SEQ ID NO: 2. Support for these amendments can be found, for example, in the originally filed claims. Claim 5 has been amended to correct a typographical error. Claim 19 has been amended to include the phrase "whereby the contacting occurs in a cell". Support for this amendment can be found, for example, at paragraphs 39, 53 and 56 of the specification.

No new matter has been added by way of these amendments.

#### The Species election

In the current Office Action, the Examiner states on page 2, last sentence, that "the election of a specific sequence is not subject to rejoinder under Markush practice, because the different sequences are structurally and functionally different compounds that do not share a *common core structure*, and therefore, constitute separate inventions rather than distinct species." (Emphasis added.)

Accordingly, Applicant has amended claims 1-3, 5, and 7-11 to be limited to SEQ ID NO:2 and species thereof. Therefore, all of the sequences in dependent claim 2 do share a *common core structure*, specifically, (GGA)<sub>3</sub>GG.

For the reasons set forth in the response filed July 10, 2006, specifically pages 12-16, and also above, Applicants respectfully request that the restriction requirement with respect to the “patentably distinct species,” as discussed in the previous response, be withdrawn and treated as though it were a species election under the procedure set forth in MPEP 809.02(a).

Pursuant to 37 C.F.R. § 1.144, Applicants reserve the right to petition for review of the restriction requirement at any time prior to appeal.

#### Outstanding objections

Claims 2, 5, 22, 25, and 28 are objected to as allegedly reciting non-elected subject matter, specifically non-elected nucleic acid sequences.

Claim 2 has been amended to be directed to only species of the genus claimed in amended claim 1. Applicants traverse the objection of claim 2 for the reasons set forth in the response filed July 10, 2006, specifically pages 12-16, and the arguments set forth above.

Claim 5 was objected to as being of improper dependent form. Claim 5 has been amended to be properly dependent from claim 1.

Claims 22 and 25 have been cancelled without prejudice or disclaimer.

Claim 28 is a proper dependent claim, because it is dependent from claim 27 which contains the language “wherein the test quadruplex DNA *comprises* the nucleotide sequence...(SEQ ID NO:16)....” (Emphasis added.) The Examiner has indicated in the Office Action mailed January 10, 2006, on page 19, that the art “neither teach[es] or suggest[s] the use of the 38 bp region comprising the instant SEQ ID NO:16 contained within said genes in a method of identifying quadruplex-interacting molecules or quadruplex-forming structures.” In addition, on page 2, second paragraph of the current Office Action, the Examiner again acknowledges that “the elected SEQ ID NO: 16 was indicated to be free of the prior art...” Therefore, in claim 28, what is claimed is a test quadruplex DNA *comprising* SEQ ID NO:16 *and* (GGA)<sub>4</sub>AGA(GGA)<sub>3</sub>GGC (SEQ ID NO:15); (GGA)<sub>4</sub> (SEQ ID NO:1); GGAGGGGGAGGGG (SEQ ID NO:17);

AGGAGAA(GGA)<sub>2</sub>GGT(GGA)<sub>3</sub>G<sub>3</sub> (SEQ ID NO:18); (GGA)<sub>3</sub>AGAATGCGA(GGA)<sub>2</sub>G<sub>3</sub>AGGAG (SEQ ID NO:19); CCGAA(GGA)<sub>2</sub>A(GGA)<sub>3</sub>G<sub>4</sub> (SEQ ID NO:20); (GGA)<sub>2</sub>CCGA(GGA)<sub>2</sub> (SEQ ID NO:25); GGAA(GGA)<sub>3</sub> (SEQ ID NO:23); AGAAGAG(GGA)<sub>3</sub>G (SEQ ID NO:22); AGCGA(GGA)<sub>8</sub>GAGGAA (SEQ ID NO:21); or a combination thereof.

#### Outstanding rejections

Claims 22 to 26, are rejected under 35 U.S.C. §102(e) as allegedly anticipated by Siddiqui-Jain, et al., U.S. patent application publication no. 2004/0005601 A1 (hereinafter “Siddiqui-Jain”), having a priority date of April 5, 2002.

Claims 1, 3-11 and 19-21, are rejected under 35 USC §103(a) as allegedly unpatentable over Siddiqui-Jain, in view of Matsugami, et al., J. of Molec. Biol. 313:255-269, Oct. 2001 (hereinafter “Matsugami”).

Claims 1, 3-7, 10, 11 and 21, are rejected under 35 USC §103(a) as allegedly unpatentable over Kerwin et al. (U.S. Patent No. 6,156,763) (hereinafter “Kerwin”), in view of Matsugami.

Claims 8 and 9, are rejected under 35 USC §103(a) as allegedly unpatentable over Kerwin in view of Matsugami, and further in view of Williams, et al., Analytical Biochemistry, 176:28-32, 1989 (hereinafter “Williams”).

Claims 22-24, are rejected under 35 USC §103(a) as allegedly unpatentable over Weitzman, et al., J. of Biological Chemistry, 271(34):20958-20964, 1996 (hereinafter “Weitzman”) in view of either of Matsugami or Lee, et al., Nucleic Acid Research, 18(20):6057-6060, 1990 (hereinafter “Lee”).

Claims 25 and 26, are rejected under 35 USC §103(a) as allegedly unpatentable over Izbicka, et al., Anti-Cancer Drug Design, 14:355-365, 1999 (hereinafter “Izbicka”) in view of either of Matsugami or Lee.

Applicants respectfully traverse all outstanding rejections of the claims.

#### Rejections under 35 U.S.C. §102

Claims 22 to 26, are rejected under 35 U.S.C. §102(e) as allegedly anticipated by Siddiqui-Jain.

Although Applicants do not necessarily agree with the Examiner’s rejection, in an effort to

expedite prosecution, claims 22-26 have been cancelled.

Therefore, the rejection under section 35 U.S.C. §102(e) can be properly withdrawn.

Rejections under 35 U.S.C. §103(a)

**Siddiqui-Jain in view of Matsugami**

Claims 1, 3-11 and 19-21, are rejected under 35 USC §103(a) as allegedly unpatentable over Siddiqui-Jain in view of Matsugami.

Applicants herein submit a 37 C.F.R. § 1.130 Declaration to disqualify a commonly owned published application as prior art, specifically the Siddiqui-Jain application. The Declaration meets the requirements as set forth in § 706.02(l)(2)(II) of the MPEP, entitled “Evidence Required to Establish Common Ownership”. In addition, Applicants will submit a Terminal Disclaimer upon the allowance of claims.

Therefore, the rejection under section 35 USC §103(a) can be properly withdrawn.

**Kerwin in view of Matsugami**

Claims 1, 3-7, 10, 11 and 21, are rejected under 35 USC §103(a) as allegedly unpatentable over Kerwin in view of Matsugami.

Both claims 1 and 19 have been amended to include the phrase “whereby the contacting occurs in a cell”. Claims 3, 5, 7, 10 and 11 depend from amended claim 1 (claims 4 and 6 has been cancelled). Claim 21 depends from amended claim 19. Neither Kerwin or Matsugami describe any cellular assays in which transcription is measured.

Therefore, Applicants respectfully aver that the limitations added to these claims in this instant amendment address the Examiner’s concerns, thus after entry of this amendment Kerwin and Matsugami do not teach the (amended) claimed invention.

Thus, the rejection under section 103(a) based on Kerwin in view of Matsugami can be properly withdrawn.

**Kerwin in view of Matsugami, and further in view of Williams**

Claims 8 and 9, are rejected under 35 USC §103(a) as allegedly unpatentable over Kerwin in view of Matsugami, and further in view of Williams.

For reasons discussed above regarding Kerwin and Matsugami, claims 8 and 9 that depend from amended claim 1, do not teach the (amended) claimed invention. In addition, Williams does not cure the defects of either Kerwin or Matsugami.

Thus, the rejection under section 103(a) based on Kerwin in view of Matsugami and further in view of Williams can be properly withdrawn.

**Weitzman in view of either of Matsugami or Lee**

Claims 22-24, are rejected under 35 USC §103(a) as allegedly unpatentable over Weitzman in view of either of Matsugami or Lee.

To expedite prosecution, claims 22-24 have been cancelled without prejudice or disclaimer.

Thus, the rejection under section 103(a) based on Weitzman in view of either of Matsugami or Lee can be properly withdrawn.

**Izbicka in view of either of Matsugami or Lee**

Claims 25 and 26, are rejected under 35 USC §103(a) as allegedly unpatentable over Izbicka in view of either of Matsugami or Lee.

To expedite prosecution, claims 25 and 26 have been cancelled without prejudice or disclaimer.

Thus, the rejection under section 103(a) based on Izbicka in view of either of Matsugami or Lee can be properly withdrawn.

**Obviousness-like double patenting**

Claims 1, 3-6 and 8-11 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 92-94 and 98-103 of co-pending U.S. Patent Application Serial No. 10/407,449. Applicants note that claims 4 and 6 have been cancelled. Applicants elect to hold this matter in abeyance until such time claims are allowed.

CONCLUSION

In view of the foregoing amendment and remarks, Applicants respectfully aver that the Examiner can properly withdraw the rejection of the pending claims under 35 U.S.C. §§102 and 103. In view of the above, claims in this application after entry of the instant amendment are believed to be in condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 532232000500. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

As noted above, Applicants have requested a telephone conference with the undersigned representative to expedite prosecution of this application. After the Examiner has reviewed the instant response and amendment, please telephone the undersigned at (858) 720-7961.

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Respectfully submitted,

By\_/Brenda J. Wallach/\_\_\_\_\_

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